DOCUMENT RESUME

ED 342 876 CE 058 942

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TITLE Conception of Soviet Community College.
PUB DATE Oct 91
NOTE 22p.; Paper presented at the Soviet-American Symposium on Teaching and Learning (2nd, Jacksonville, FL, October 1991).
PUB TYPE Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Cognitive Processes; *Community Colleges; Continuing Education; *Educational Change; Foreign Countries; *Institutional Characteristics; Institutional Environment; *Learning Theories; Organizational Objectives; Technical Education; Two Year Colleges; *Vocational Education
IDENTIFIERS *USSR

ABSTRACT

The USSR lacks qualified workers and midlevel specialists. A variant of community colleges in the United States is being organized in Kazan and Nizhnekamsk to prepare middle-level managers and qualified workers. The community college has been established as a basic educational institution for perestroika of the Soviet professional educational system, as a means of converting to market economics, and as a continuous education model. It will train middle-level managers and workers and offer retraining. The community college will combine three existing educational institutions. The concept of continuing education will be realized by means of 5-year, three-stage study period. The three progressive stages are qualified worker training, technician training, and preparation of junior engineers. General and vocational subjects are closely integrated. Acquisition of scientific and technical knowledge remains the major purpose of study, but intellectual and practical competence is also a focus of the teaching/learning process. The community college environment also provides an opportunity to combine Soviet and U.S. approaches for interpreting the intellectual activity levels of individuals and current learning theories. (YLB)

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SECOND SOVIET-AMERICAN SYMPOSIUM on Teaching and Learning

Jacksonville, Florida

CONCEPTION OF SOVIET COMMUNITY COLLEGE

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October 1991

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The Reserch Strategy

Our nation, the vastest in the world, exclussively rich in minerals, with a big intellectual potential and powerful industry, that was the first to conquer the cosmic spase has reach the stage of a severe crisis. The ideas of socialism and communism with their principals of people's equality have failed. The faults in philosophy, politics, ideology, society organization and goverment have caused the entire crisis..

Socialism has not survived regardless of the fact that not only communists considered it to be the model of social justice idea realization.

Currently the life- conditions for the majority of population are severe. We couldn't have approached the market over six past years. I suppose it was because of managers' incompetency. Our leaders, as people say, were not even able of organizing the Coup in a clever way.

Today we all realize our future is in democratization, convertion to market, state property privatization, including both services, industry and agriculture. But privatization solely wouldn't be to an effect if the consume-goods quality improving as well as the redusing their prices were not taken into consideration.

To achieve it we are in need of highly qualified workers and competent managers.

Because of conversion to market we will suffer from our thinking stereotypes breaking both in our strategies and tactics. Speaking of our nation's economical power we used to indicate the quantitative factor- millions tons of steel,oil,cement,cotton, the hundred thousands tractors, combines, etc.

What about the Americans? They indicate the quality.My colleague, the Waukesha County Technical College President Dick Anderson remarked that for the americans the major indices are- the market capacity,the technological advancements,the income per head,the workforce professional competence, the managers'competence.

We would fail in case our managers economic thinking isn't enriched with new categories of economics evaluation.

The old Greeks used to tell -"comparison is knowledges mother".In comparison with the USA we have 3 times less higly-qualified workers but 3 times more low-qualified ones.That's why the productivity in the USSR 3 times lower than in the USA.For instance in our motor industry one worker produces 5-6 cars a year, an American worker-12-13 ones, Japanese -35-40 cars.

The quantitative categories were the main in solving the problems of workers training.Highly-centralized planning has led to overwhelming workers training in some occupations and lack of workers in others.

Where and who prepares workers and mid-level specialists in the USSR? We have the following training system:

- Professional education and vocational training(more than 7 thousands vocational schools with 3 year study period enrolling 3,5 million students prepare workers).

- The system of secondapy specialized education (more than 4,5 thousand technicums with 4-year study period enrolling 4 million students beginning with 15 years old-prepare technicians.

-The system of higher education(more than 9 hundred institutes with 5 million students trains specialists with university diplomas,meantime engineers were prepared 4 times more than in the US.But what about their productivity? Why can't the workforce training system contribute to economics development especially when converting to market? The reasons are numerous-the centralized governing the educatinal institutions,the branch principle of professional schools organization, the old curricula and programs,conservative instructional methods,low prestige of working occupations and professional schools caused by economical basis absence as well as low salaries..

What are the ways for reforming the workers' and specialists training system? The strategies are multi-directed. They comprize the professional education decentralization firstly, secondly -educational institutions of a new type establishing. They are as follows - technical lyceums on basis of professional schools and technical colleges on basis of technicums.The idea of continious education and democratisation by step by step instruction is

being implemented.

May we say we have found the educational institutions of anew type meeting the market needs? Our investigations reveal that it won't suffice.The branch principle of educational institutions organisation limits their opportunities for people td get professionally educated in relation to option,location,etc.

The investigations also revealed there exist some laws in professional education development that one should by all means consider.For instance we revealed the tendency fdr integration the functions of the 2 types professional schools:schools wor workers training and schools for mid-level specialists training.Formerly more than 50% technicum graduates joined the industry, the successful graduates became masters and team leaders. With the appearance of Lyceums and colleges this tendency got stronger: now mid-level specialists will be prepared in Lyceums,workers - in technical colleges.

That's why the integration of workers and specialists functions is one of the underpinning tendencies.Besides one more interesting phenomenon is turned out in world practise.I dare say ,it is also interesting for our American colleagues.Once I complained my friend Chuck Spens, the Jacksonville College President, of our being leg-behind from US in technical aspect and that we would never be able of catching it in this area.I received a short answer:"You may jump ".

I doubt if we can jump,but in any case we have to look forward. What are the statuses of a worker and a mid-level specialist currently? Their functions are various. But sometimes specialists have to fulfill the workers job and vice versus(for example approximately 2 million engineers occupy the workers places.It deals with rapid complexing of technics and technology, with the labour intellectualization that demand a highly -leveled vocational training of a worker and a specialist. Thus the integrative tendency of worker and specialist functions has two aspects: the integration of labour and manage roles and the integration of labour and organisational-financial functions and proves through development of european and american componies and firms. The

reform content at Sweden electrotechnical enterprise "ACEA BROWN BOVERN" that got the name "the second industrial revolution" may be explained as Arto Hamberg put it: In our enterprise there's no difference between a worker and employee.The employee roles are performed by workers either and the employees have to have a detailed idea of industrial process and participate in it actively.All of them are called "associates". (The newspaper"IZVESTIJA", August,15,91).

The major roles analisis of workers and swiftly changing demands to them revealed that the most suitable type of vocational educational institutions within the democratical tendencies and market relations appeared to be the American community college. Such educational organisation gives the possibility to train and educate not solely workers of all occupations, but also all citizens of the community. Not limited but multi-profile vocational schools have the future.

Considering this fact we began to develop the community college structure approaching the American community college. This task will be solved using the experiences of American colleges in Jacksonville, Saint Louis, Waukesha.

I'd like to discuss at present Symposium the possible variant of such college that we began to organize in Kazan and Nizhnekamsk.

THE KAZAN COLLEGE THREE-STAGED TRAINING OF WORKERS AND SPECIALISTS FOR DIFFERENT INDUSTRIAL BRANCHES AND SERVICES

All Kazan vocational schools are organized according to branch principle and linked with basic enterprises.4-year summer Lyceum , 3-year vocational school , general secondary school with technical accent in senior classes are sponsored by the Kazan Aviation Motor-building Enterprise.All these 3 educational institutions being combined may serve a good educational establishment like community college.Step-by-step preparation for the opening and introducing the new curricula and programs are planned.

COLLEGE ESTABLISHMENT GOALS

Establishment in the USSR of a new type professional educational institution is encouraged by conversion from the branch principle of educational institution functioning to the regional-branch one.

Their reform is implemented through management decentralization, integration and differentiation, democratization as well as humanization. The Community College is established :

- as the basic educational institution for the total Soviet professional education system perestroika,
- as a means for conversion to market economics, means of consume goods competebility enhancement, means of Labour market shocks social amortization and small business enterprises development,
- as the continious education model and the means of skilled workers and mid-level specialists general vocational training and the community population professional level upgrading,
- as a factor of the youth and adults social protection from the total unemployment, as people's psychological preparation for market, the specialists' retraining,
- as an experimental base for the American Community College educational experience and new educational and informational technologies application.

THE COMMUNITY COLLEGE GOALS:

- middle-level managers and juniour engineers with a hign-level of professional and technical management competence training,
- highly-qualified workers and employees training for various regional production spheres,
- the permanent retraining of the workers, engineers and the unemployed,
- the total community population general and vocational training in accordance with their needs,
- conditions of vocational training of specialists in the native Tatar language.

OBJECTIVES:

- to provide the workers and specialists with a high-level skills in machinebuilding industry, small-business and services basing on the new pedagogical technologies and curricula, to provide the workers with the international standard diplomas,

- to democratize the educational establishment (the opportunity for the students to choose the profession to their declinations, home learning),

- to involve the American vocational training experience as a basis for a technologically advanced labour curricula, programs, text-books, instructional materials),

- to provide the students with a broad computerized and humanitarian training using srecial programs, instructing in Russian, Tatar, Turkish and English (different groups on various occupations),

- to provide modern American technologies studying and college graduates 'training for reduced learning period in "relative" higher educational institution to provide the total community with the continuing professional education.

THE COLLEGE STRUCTURE

As it was mentioned above the community college will combine three existing educational institutions and new centers will be opened.

1) The technical lyceum with a multi-profile curriculum similar to American community college curricula with a three-level students training as a base for continuing education.

The lyceum trains mid-level specialists for Motor-Building Enterprise and technicians and juniour engineers for other production units (in accordance with their needs).On the first level the highly-skilled workers (the qualification level-4) may also get trained. The total learning period after the 9-th grade is 5 years (3- year program for gaining first jobs, 4- year program for tecnicians, 5- yearb program for the juniour engineer staff; after the 11-th grade - 3,5 years.

2) The Vocational school, specialised in step by step

metal-workers (qualification level 2-3) for motor building enterprise training and retraining. The Vocational School prepares students for employment and for continuing the education in the Lyceum, The learning period afler the 9- th grade is 1-3 years. The service staff training with the learning period from 1 month up to 2 years is also available.

3) 3 - language comprehensive Technological school (8-11 grades) with the initial vocational training. The School trains students for continuing the education in a Vocational school, Lyceum and for higher education. The learning period is 2-4 years. The Certificate is awarded after the 9-th and the 11- th grades.

4) The Department for the students with a secondary education certificates based on a higher education programs (the first 2 years), regardless of age and occupation.

5) Continuing Education Center for college staff and enterprise engineers and technicians.

6) The Commercial Center with small business capable of working on their own resources due to conversion, and consume goods and machine-details co-production with Americans in accordance with the enterprises' orders;the major workers are college students.

7) Technical literature (English, Russian, Tatar and Turkish languages) Translators Training Center.

8) Information technologies Center.

9) Instructional Publishing Center.

10) Psychological and Social Services Center.

The USSR Academy of Pedagogical Sciences Research Institute units (scientific divisions) constitute a part of the college structure for its scientific technical provision, for investigating the problems of vocational education in Tatarstan (pedagogics, psychology, the educational economics, vocational orientation, etc.) and for involving practitioners in research activities.The faculty of higher education will participate.

STEP-BY-SIEP TRAINING

The idea of continuing education is realised in college by means of step-by-step training organisation.It means the

entire 5-year study period is divided into 3 stages. The first one - for 3 years- is the qualified workers training, the second- 1-year-is the technics training, tne third stage of 1-year is the preparation of juniour engineers.

But in some campuses another kind of step-by-step training may occur.For example,in vocational school those who is eager may graduate in a year with a worker qualification in simple occupation.In 2 years the certificate of second qualification level may be received.In 3 years the graduate with worker diploma will be prepared.

Step-by-step training is the most democratic form of education, because it gives the student the possibility to choose the desired occupation and the study period as well as the ways of further education. It allows to differentiate the training contents regarding the actual students abilities, advising them either to stapt working career or continue studying.The faculty is therefore given the chance to select students according their abilities, that had earlier been prohibited.The selection is necessary for further training on upper stages and for preparing the capable and eager students for higher education.

TECHNICAL BASE CHARACTERISTICS

Kazan Community College is established on the technical base of the incorporated educational establishments. For example, the technical college has a study building enough for solving the college problems.
The working shops, the equipment are being permanently improved.We have new buildings for the hostel and canteens.Of cause we need new machinery and computers. But we can't have everything. They say:"Moscow has not been constructed in a moment".

THE MAJOR OCCUPATIONS LIST

It is impossible to give a complete occupations list. It will be permanently extending. But the following will lead:

a) Workers with qualification level 2-3:

- turners,
- fitters,
- milling-machine operators,
- planers.
- constructers

b) Workers with qualification level 4:
- wide-profile machine operators,
- adjusters,
- numerical-program machines operators,
- computer-machinery operators, etc.

c) Specialists:
- technico-technologists,
- programming technicans,
- managers,
-economists
- mechanics, etc

d) Juniour engineers on basic occupations of Aircraft,Finance,Energetic institutes
- metal-cutting,
- electric equipment,
- electronics,
- economics, etc.

e) Businessmen:
- small business establisment,
- jont-venture establisment,
- trade-staff, etc.

f) The servise major occupations:
- translators,
- municipal services workers,
- account clerks,
- book-keepers,
- nurses,
- juniour grades Tatar language teachers in Russian schools.

THE STUDENT ENROLLMENT

The annual college entry is approximately 700-800 students, including 400 students as workers, 200 students as specialists, 200 students as service workers, 1500-2000

students as part-time students.

The continuing education system may serve up to 5000 students, including up to 50 % of workers and engineers of the motor-building enterprise.

In 1993 the full-time system is expected enroll 2100-2300 students, and 4000-5000 students as part time. The total enrollment is up to 6000-7000 students.

The annual secondary school the 9-th and 11-th form graduates may be 120-140 students (in the vocational school - 40 students, in the Lyceum - 60, in the higher education 20), from vocational school after the first, second, third courses - 240-260 students (to basic enterprise approximately- 160, to Lyceum 60, to technicums and higher education - 20). The Lyceum graduates after the third, forth, fifth courses to the basic enterprise - 180, including 50 workers, 100 specialists, 60 to higher education.

On the whole, annually, up to 400-600 students may be sent to industry; 250-280 students may continue their education. Up to 3-3.5 thousand students may improve their qualification and be retrained. These figures are approximate,they may either reduce or extend.

TEACHING/LEARNING PROCESS CONTENTS IN COLLEGE

The most significant condition of the workers and specialists training in the Community College is the Study contents reform on basis of humanisation, integration, differentiation, informatics, problem-solving activities etc.

The close correlation between general and vocational subjects and both cycles with tne industrial training and practics serves as a condition for knowledge system and integrates personality formation, characterised by a high-level competence. The up-to-date knowledge both in natural sciences and in the field of technics and technologies should become the optional feature of the Study contents.

The Study contents humanization should be reflected not only by including in the structure of vocational subjects such disciplines as history, the technics history, the history of arts, the history of civilization but also the

elements of humanitarian knowledge.

COLLEGE CURRICULA

The College Curricula are based not on the existing curricula improvement, but on scientifically based calculation of studies time per days, weeks and years. The modern vocational education conception in the educational establishments of new type is given in references to college curricullum, the principles of contents option and its combinations are formulated in curricula and programs.

The subject in the corriculum are distributed by cycles (traditionally) by general, general technical and general occupational,special.. The alternative group of subjects in each cycle is suggested, optional subjects are mentioned, subjects for deep-on study and facultatives are noted. The principles of step-by-step study, cohesion and integration are necessarily reflected in curriculum (see appendix).

The number of hours per a subject is determined by the knowledge and skills volume, mentioned in a qualification characteristics of a worker or a specialist. The week amount may compris 36 hours but may vary in accordance with the situation.

The total amount of study hours today is 4470 including 2140 hours for the 8,9 grades, 23-30 hours for the 10,11 grades, 42-90 in vocational school, including, general course is 1920 hours, 360 hours is a general technical one, 2300 hours - vocational.

4630 hours is a total amount in Lyceum : 2270 is a general course, 2350 - general-technical one. The total college figure is 5600,wut may be up to 6000.

Tne general and vocational disciplines correlation as well as the problem of theory and practice is solved by College Experts Council.The major problem in investigating the algorithms of the curricula combining in training the workers and specialists of various qualification level.

PROGRAMS, SUBJECTS, COURCES

The Programs are formed on the analysis basis of the

college graduate qualification characteristic, subject context and curriculum framework. They are flexible, giving tne staff itself ihe possibility to change the syllabus structure, to introduce new information and to remove the old one depending upon concrete students characteristics, the group instruction level, the occupational specialisation, technical aid, etc.

The Programs quality is assessed during instruction, by scholars' experiments and evaluated by an expert group, consisting of the relative college staff and enterprises' represantatives.

TEACHING/LEARNING PROCESS

The teaching/learning process in college demands the root reform firstly in the aims of its organization. Naturally the scientific and technical knowledge acquiring remains the major purpose of study . But intellectual and practical competence formation should be in the focus of the teaching/learning process.

The labour and industrial processes intellectualization has already challenged the problem of staff training, capable not only exactly perform their duties, but to independently solve the industrial and technico-technological problems appearing in the technological process in people's interaction. That's why the major accent in the teaching/learning process is made upon the students thinking development as an important socio-economical reserve of scientific-technological process instead of scientific-technical process.

Hence the new pedagogical technologies, appearing as a result of traditional problem-solving didactics, as well as the result of computing learning development and technical aids use, new informational means of communication and relations between teacher, students, each group members should be introduced in teaching/learning process.

WHAT ARE PSYCHOLOGISTS DEBATING OF?

There is no need to prove that all the tuition today

should be organized on the model of intellectual developing teaching. The intellectual potential of any state is a main resourse for it's economic and social progress.The scientists of the whole world look for the possible ways of solving that problem, very often their approaches happen to be not identical.

It is known that a teacher may teach to think creatively only if he himself can think creatively.Consequently he himself should be educated.Firstly it is necessary to explain what are the psychological laws of active, productive and creative thinking.Only on basis of more or less proper knowledge of these laws the setting of didactic methods and means is possible.

There are 2 controversal viewpoints on nature of thought in Soviet psychology.One scholars state (Rubinstein S.L.,Vigotsky L.S.,Matiushkin A.M. etc) that there may be different levels of a thought: reproductive and productive.

The latter in its turn is divided into analitical and heuristic or creative thought.Some psychologist think it is impossible to talk of levels of thinking.If an individual thinks he always thinks creatively(Brushlinsky A.V.)..

In American psychology the human thinking activities levels are considered types of thinking.Exept the creative one they separately examine the critical thinking.But sometimes all types of thinking are called similar:problem-solving,creative, critical.

John Dewy was the first to put forward the idea of special teaching the children to think creatively by means of problem-solving instruction.The book "How do we think"appeared to be the beginning of developing the problem-solving teaching/learning .

The English psychologist Edward de Bono distinguished 6 styles of thinking (each of which is marked by its own color).Respectively the different means of intellectual formation are suggested.The German scholars who themselves revealed the phenomenon of problem situation at the end of the last century, worked out the entire system of methods of intellectual training on the material of various subjects.

I've had to deal with problems of problem-solving

teaching/learning for more than 20 years.Several books have been released ,some are traslated into different languages:spanish,chinese etc.Unfortunately there are no English translations.

To my mind currently there's an opportunity to combine the Soviet and American approaches for interpreting the intellectual activities levels.Let me focus your attention on demonstrating these levels with the help of problems on which the thinking is directed.

Puzzle 1.A flock of geeze flew acposs the sky.A goose approached them ,greeting in the following manner:"Hallo, a hundred of geeze!""No - they answered - we are not a hundred of geeze.When we are twice as much, half as much, a quarter as much some and You ,the Goose, then we are a hundred of geeze".The question is :"How much geeze there were in the flock?" How is this problem solved?Selecting in mind various figures-30 plus 30 -less, 40 plus 40 - too much etc.A person finds out that there were 36 geeze in the flock.

What kinds of thinking is it? Certainly a reproductive one,because we have no discovery, no new knowledge an individual acquires.

Puzzle 2. An old man approached the river.He had 3 animals with him: a wolf, a goat and cabbage..A boat can take only one.How to transport them to the other side of the river? If the wolf is the first, the goat would eat the cabbage.But if to take the cabbage, then the wolf would eat the goat?! The old man decided to take the goat first(wolf doesn't eat cabbage).Then he gets back and again a question arises-if to take the cabbage to the other side then the goat will eat it, and if to take the wolf and return fo cabbage - the wolf will eat the goat.Here comes a problem situation.To solve the problem a guess-procedure is necessary:the old man takes the cabbage in his second trip, the goat is taken backwards and left there, and the old man takes the wolf to the board.Here we witness an example of reproductive thinking in combination with productive.

Puzzle 3.Two men approached the river and asked for aboat a boatkeeper.Take it - he answered- but the boat will bear only one.And you are to return it. Here is the problem situation.Thinking over the problem isn't a decision.One

needs merely guessing.The fellows came from the opposite sides of the river. The puzzle is immediately solved.Here we witness a pure insight, a guess-work without analisis.

So explaining the nature of a thought, we can construct the modes and methods of problem-solving teaching/learning organisation on material of mathematical,phisical, historic problems..

Taking these psychology laws into account I have shaped the system of instructinal methods.What does the term " psycho-pedagogical" mean?Thus on basis of Soviet approach we single out 3 types of thinking:

-reproductive (the memory work)

-analitical(logic analisis and synthesis)

-heuristic, creative (logic,insight,guessing)

Edward de Bono singles out 6 styles of thinking are well-known to American educators:

-reproductive (white hat)- data information

-emotional(red hat)- emotional perception, absence of logical analisis

-critical(black hat)-logical analysis of negative aspecis of a problem

-constructive(yelow hat)-logical analysis of positive aspects of a problem

-lateral (green hat)- analysis,logics,guess-work, alternative decisions

-conceptual (blue hat)-generalization,creativity.

It is known that the modes of learning and the styles of thinking often coinside: perception, analysis, generalization, concrete definition, comparison etc.

Cannot all these modes of different types of thinking be synthesized so, then ehpress them in pedagogical modes and methods teaching? In this very case the teacher will get the methodic instumentarium to govern the cognitive astivity of the pupils and to form their intellectual skills. Isn't it possible to include in our previous sistem of methods the new knowledge about the nature of the thought?

During our 1-st symposium in Anapa I made an attempt to demonstrate the types of problem-solving teaching/learning as combination of definite instructional forms and methods. My further research revealed that they could

constitute a basis for differently functioning educational technologies development.

The basic nomenclature of methods is determined:

- Monoldogic
- Illustrative/Demonstrative
- Dialogic
- Heuristic
- Investigature
- Programme
- Algorithmic

These methods have binary nature (i.e. interaction of two prosesses-teaching and learning).

- informational
- explanatory
- instructive
- stimulating
- motivating
- executive
- reproductive
- practical
- semi-searching
- searching

All above-mentioned methods reflect different variants in teacher-student interaction each of whom passes their own methods and means. If the teacher gives some information regulations (rules), demonstrate certain aticles (itens), explains the essence of the matter, puts the questions - which of the methods we could speak of. If explanation is deminating, i.e. distingwish the analisis of facts, their comparison, generalization etc, then we can speak of the explanatory method of instraction. If the essence of facts isn't explained, but the solery pure information is given, we can speak of the informational method of instruction. Relevantly if the students are listening, making observations and memorizing we can speak of the seproductive method. If the teacher is mainly patting the problem solving questions and isn't explaining anything just directing the cognitive activities of a student we can speak of the motivating method, as to the students, they are working in

as searches, i.e they independenthy put a problem< frame hypotheses prove there or quess how to solve the problem by independent analusis of facts. We can speak of prolblem-solving teaching/learning.

What will be the level of thinking in above mentions teaching/learning methods? Both the executive in the reproductive methods speak for themselves: the reproductive thinking is taking place here.

The problem situations may frequently occur in students practicies. The students should be thinking more actively. We might call this an analitical or heuristic approach, or according to de Bono we might call this thinking from emotional to a conceptual level. All depends upon the nature of the facts the student meets in his practice.

The semi-searching and seaching teaching/learning methods also reflect five thinking styles acording to de Bono conception or analitical and heuristic thinking styles according to Rubinstein. In every particular case all depends upon the complexity of information recieved< the students skills and teacher's techics. The material analusis may be either critical leading to alternative questions, but there may appear an insight - then we would solve problem with the help of creative thinking.

The teacher cann't explore a single instructional method, for example solely investigatory or algorithmic. The teaching/learning process would will make an effect only when combining variouos methods. But what combination of teaching/learning methods will the teacher prefer in various pedagogical situations? It depends upon the teacher's learning experiences and his pedagogical intuition. But being a professional he should have known the regulations.

The research revealed that there exist typical pedagogical situations where given a definite structure of instructional materials content we always withess the combination of the same teaching/learning methods.

On this basis we try to single out several pedagogical technologies directed to students thinking improvement.

We'd like to identify the above technologies:

- problem-dialogic (dialogue, convensation)
- problem-task (cognitive tasks solving)

- problem-model (game, the model of performance)
- problem-computer
- problem-context (modelling the subject and social content of professional activities)
- problem-modular (integration of problem-solving content with methods and means of program learning)

All these technologies are defined as problem becaus they may be informational,not improving students thinking abilities.

I hope we'll succeed in debating these statements for solving the emerging questions and designing exact recommendations for educators for them to use them in their practice.

FINANCING

The federal budget, enterprises' grant, tuition fee (on orders), college production and commercial activities, sponsors' grants are the major resources.

It's necessary to define the major resources for college opening and basic expenditures on:

- faculty and administration salaries in the college (in roubles in the USSR and in dollars in the USA),
- technological equipment and educational technical aids supply (computers, lap-top press, telecommunication equipment),
- American materials and documentation translated into Russian,
- learning and instructional materials printing (in roubles and in dollars),
- faculty and instructors' retraining courses organization in the USSR and USA (both in dollars and in roubles),
- providing the opportunity for the specialists, students and faculty to visit the USSR and the USA (both in dollars and roubles), etc.

COLLEGE MANAGEMENT

The college is governed democratically by the College Counsil, the General Director or the President or the College Counsil chairman is at the head of it. The organizational procedures, the material - tecnical supply staff placing of financing, interrelations with industry are his competencies.

The campuses and self-financing centers function according to the common plan. Each campus director's competence is mainly concerned with teaching/learning process and graduates training provision. All of them maintain relations with industrial enterprises, represented in College Councils and campus faculty councils. The Advisory Commitee, assigned by the Republic Government carries out the external government. The Centers directors are under the authority of College President and works independently on a self-financing base.

AMERICAN COUNTERPART PARTICIPATION

The experimental activities are beeing carried out in accordance with the American Association message from April 30, 1990 and with the agreement between Professional Education Columbian Centre and the Research Institute of Secondary Special Education of the USSR APS.

The Florida College of Jacksonville, the Waukesha County Technical College (Visconsin), the St. Louis College (Missouri) and the others as well as the Ohio University Professional Education Centre technically assist the Tartar college in:

- supply the college with their programms and textbooks (in English) for managers and motor-building and small-business staff training,
- exchange instructions for temporary provision,
- assist to equip the college classrooms with computers and other technical aids,
- cooperate in managers, mid-level specialists and highly-skilled workers training research,
- publish in cooperation with the Research Institute the teaching materials and college papers in Russian and English with the Soviet and American partner colleges faculty and students participation.

Everything that I have set forth doesn't have a claim on trueth. It will require an additional testing. The experemental simultanious traning in the USA and USSR colleges including the joint publication will serve the right. I am inclined to think that this would to more objetively evaluate the results of our joint research and cooperation.